

Lawrence and partly from the west and southwest after sufficient removal of the ice to the northward. Human agencies have been perhaps the most effective means of distributing these plants.

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THE VALIDITY OF THE GRASS GENUS DIGITARIA.

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DIGITARIA, as generally accepted (for a genus or a section of *Panicum*) for the last hundred years, has included *Panicum sanguinale* L. and its allies. *Digitaria* was rejected by Nash¹ because it was thought to be a homonym of *Digitaria* "Heister (Adans. Fam. Pl. 2: 38. 1763)," and *Syntherisma* was accepted in its place. A re-examination of the evidence shows that *Digitaria* should be accepted as valid, *Panicum sanguinale* L. being selected as the standard species.

The first use of the name *Digitaria* was by Fabricius² where it is credited to Heister, "Digitaria Heist.; Dactylis Rai. Gramen dactylon majus panicula longa, spicis pluribus nudis crassis. Sloane." The Sloane reference given by Fabricius is cited by Linnaeus³ under *Panicum dissectum*. Under the American Code *Panicum dissectum* has been assumed to be the type of *Digitaria* Heist. because the two names are "associable by citation," which fact also established effective publication under that code. In an investigation of the Linnaean types of American grasses⁴ it was found that the Sloane reference was cited by Linnaeus under *Paspalum virgatum* in 1759, as well as under *Panicum dissectum* in 1753. The specimen in the Sloane Herbarium is *Paspalum virgatum*.

I think this reference of Sloane's plant to *Digitaria* by Fabricius should be considered an error, a misidentification. The identification was doubtless made from the plate in Sloane's work. European botanists at that time had a very vague idea of the tropical American flora and too much weight should not be given to the citation of exotic references. It appears that Fabricius himself recognized his error for in the second edition of his work⁵ he omits the Sloane refer-

¹ Britt. & Brown, Illustr. Fl. 1: 110. 1896.

² Fabr. Enum. Pl. Hort. Helmst. 207. 1759.

³ Sp. Pl. 57. 1753.

⁴ Hitchcock, Contr. U. S. Nat. Herb. 12: 133. 1908.

⁵ Fabr. Enum. Pl. Hort. Helmst. ed. 2. 374. 1763.

ence, which he replaced by a synonym from Clusius and by a description, both of which refer to *Panicum sanguinale*. In the original edition the first reference is “*Dactylis* Rai.” Ray¹ has no group called *Dactylis*; but under the heading “*De Gramine Dactyloide seu Ischaemo*” (obviously what Fabricius referred to) are included a number of grasses with digitate inflorescence (*Andropogon hirtus*, *Cynodon dactylon*, and others) one of which was later described by Linnaeus as *Panicum sanguinale*. Taking Fabricius’ reference to Ray, instead of that to Sloane, as the basis of *Digitaria* Heist., we find *Panicum sanguinale* to be one of the elements of the group, and probably the only one in the region covered by Fabricius’ flora.

Taking all these facts into consideration it seems reasonable to select *Panicum sanguinale* as the type of *Digitaria* Heist., although the genus was not yet effectively published.

The next use of *Digitaria* was by Adanson,² who credits the name to Heister. The tabulated characters used by Adanson are vague but from his group characters and from the index it is evident that he had in mind, in part at least, *Tripsacum* and *Coix*. Since Adanson does not propose a new genus but credits the name to Heister his use of *Digitaria* should be regarded as a misapplication, not the publication of a new genus.

Haller³ gives a generic description of *Digitaria*, crediting the name to Heister and Adanson, and including *Panicum sanguinale* L. and *P. dactylon* L. (*Cynodon dactylon*) but not giving binomial specific names.

Four years later Scopoli⁴ describes “*DIGITARIA HEIST. ADANS. HALL.*” and includes the two species described by Haller, giving them the specific names *D. sanguinalis* and *D. dactylon*. This is the first adequate publication of the genus, which should be cited *Digitaria* Heist.; Scop. Fl. Carn. ed. 2. 1: 52. 1772.

Persoon⁵ separated the two elements, retaining *Digitaria* for *Panicum sanguinale* and its allies and giving the new generic name *Cynodon* to *Panicum dactylon*.

In the preceding paragraphs I have given the facts concerning *Digitaria* and have indicated my judgment as to the best method of

¹ Hist. Pl. 2: 1271. 1688.

² Fam. Pl. 2: 38, 550. 1763.

³ Hist. Stirp. Helv. 2: 244. 1768.

⁴ Fl. Carn. ed. 2. 1: 52. 1772.

⁵ Syn. Pl. 1: 84. 1805.

disposing of the case, namely, to accept *Panicum sanguinale* L. as the type species of *Digitaria* as used by Fabricius, by Adanson, and by Scopoli. However, I realize that not all botanists may agree with me in this. Some may insist that *Digitaria* Heister should be typified by *Paspalum dissectum* L.; others may feel that *Digitaria* as used by Adanson should rest on the description and synonymy even though Heister is cited as the author of the name. In either case *Digitaria* as used by Scopoli becomes a homonym. To insure the use of *Digitaria* in the sense of Scopoli, I would therefore suggest that *Digitaria* in the latter sense be added to the list of Nomina Conservanda.

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JOSSELYN BOTANICAL SOCIETY.—The thirty-second Annual Field Meeting will be held July 11th to 15th, 1927, at Atlantic House, Milbridge, Washington County, Maine. Rates \$3.50 per day. Milbridge, on the Narraguagus River, is near Narraguagus Bay and furnishes collecting on exposed coasts, saltmarshes, sheltered shores, and inland streams, marshes and bogs. Members and guests wishing to attend should notify Mr. George Bloch, proprietor of the Atlantic House, as early as possible. The usual programme of the society, daily collecting trips, with examination of specimens and short talks for the evenings, will be followed. For further information write Miss ABBIE F. MINOTT, *Secretary*, Phippsburg, Maine.

Vol. 29, no. 341, including pages 77 to 96, was issued 6 June, 1927.